I. Introduction

Since 1980, "liability by association" has been a basic precept of environmental law. The mere association with property where a substance is found, or an association with the substance, can give rise to financially devastating environmental liabilities. Relatively "small" environmental cleanups can cost hundreds of thousands of dollars; larger problems can cost tens of millions of dollars. E.g., Quaker State Corp. v. U.S. Coast Guard, 681 F. Supp. 280, 283, 285 (W.D. Pa. 1988) (requiring surface owner to reimburse Coast Guard $430,000 for cleanup of oil containment pit); United States v. Hardage, 750 F. Supp. 1460, 1462 (W.D. Okla. 1990) (cleanup cost estimates ranging from $54 million to $150 million), aff'd in part, rev'd in part, 982 F.2d 1436, 1448 (10th Cir. 1992), cert. denied sub nom. Advance Chem. Co. v. United States, 114 S. Ct. 300 (1993).
contaminated property\textsuperscript{3} or the operation of contaminated property.\textsuperscript{4} Association with the substance can arise by generating the substance,\textsuperscript{5} transporting it to the site,\textsuperscript{6} or arranging for its disposal in some fashion.\textsuperscript{7} Persons deemed to have “contributed” to a contamination problem can also be forced to clean it up.\textsuperscript{8}

Liability is based upon the “status” of the party, not their “fault.” Therefore, if a third party, such as an oil and gas lessee, contaminates land in the course of its operations, the “owner” of the land\textsuperscript{9} can be liable for the cleanup. The landowner’s liability arises not from their


\textsuperscript{5} CERCLA § 107(a)(3), 42 U.S.C. § 9607(a)(3) (1994) (imposing cleanup liability on any person that arranges for disposal of hazardous substances “owned or possessed by such person”).


\textsuperscript{7} CERCLA § 107(a)(3), 42 U.S.C. § 9607(a)(3) (1994) (imposing cleanup liability on any person that arranges for disposal of hazardous substances owned or possessed “by any other party”).

\textsuperscript{8} Solid Waste Disposal (Resource Conservation and Recovery) Act § 7002, 42 U.S.C. § 6972(a) (1994) (citizen suits), provides, in part:

\begin{quote}
[A]ny person may commence a civil action on his own behalf—

\begin{itemize}
\item [A]gainst any person . . . , and including any past or present generator, past or present transporter, or past or present owner or operator of a treatment, storage, or disposal facility, who has contributed or who is contributing to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste which may present an imminent and substantial endangerment to health or the environment;
\end{itemize}

The district court shall have jurisdiction . . . to order such person to take such . . . action as may be necessary . . . .

The Environmental Protection Agency is given similar authority in § 7003, 42 U.S.C. § 6973(a) (1994), which provides, in part:

\begin{itemize}
\item [U]pon receipt of evidence that the past or present handling, storage, treatment, transportation or disposal of any solid waste or hazardous waste may present an imminent and substantial endangerment to health or the environment, the Administrator may bring suit . . . against any person (including any past or present generator, past or present transporter, or past or present owner or operator of a treatment, storage, or disposal facility) who has contributed or who is contributing to such handling, storage, treatment, transportation or disposal to restrain such person from such handling, storage, treatment, transportation, or disposal, to order such person to take such other action as may be necessary, or both.
\end{itemize}

\textsuperscript{9} Who could be the owner of only the surface estate.
culpability or causation, but rather their status as the owner of an interest in the contaminated property. This creates an entirely new category of concerns for property owners who convey mineral interests in their property while retaining a surface interest. These concerns are equally compelling for a landowner who enters into an oil and gas lease. This article examines the property, contract, and statutory dimensions of how a landowner/lessor's environmental risk can impact the rights and obligations of the oil and gas developer.

II. THE PROPERTY DIMENSION

A. Ownership

Whenever more than one "owner" has the right to use property, the activities of any one interest owner may increase the environmental risks of all interest owners. The "owner" status concept used by environmental laws does not require a fee simple absolute in the property. Although an "owner" need not possess the entire bundle of sticks, the problem is defining what stick, or combination of sticks, will suffice.

One approach to defining "owner" focuses on the "authority to control" created by the property interest. For example, in *Nurad, Inc. v. William E. Hooper & Sons Co.*, the fee owner of the property was attempting to recover cleanup costs from tenants who had leased buildings on the property. Underground storage tanks on the property had leaked mineral spirits and Nurad, Inc., as the current owner, was seeking to recover cleanup costs. This approach highlights the importance of defining "owner" in the context of environmental liability.

10. United States v. Monsanto Co., 858 F.2d 160, 168 (4th Cir. 1988) cert. denied, 490 U.S. 1106 (1989) ("The traditional elements of tort culpability on which the site-owners rely simply are absent from the statute [CERCLA]."); New York v. Shore Realty Corp., 759 F.2d 1032, 1044 (2d Cir. 1985) ("[CERCLA] section 9607(a)(1) unequivocally imposes strict liability on the current owner of a facility from which there is a release or threat of release, without regard to causation.").

11. The "property" dimension also encompasses a tort dimension since exceeding the property rights granted will result in a trespass.

12. For an extensive discussion of how oil and gas relationships can be structured prospectively to avoid or manage environmental risk, see David E. Pierce, *Structuring Routine Oil and Gas Transactions to Minimize Environmental Liability*, 33 WASHBURN L.J. 76 (1993) [hereinafter *Structuring*].

13. CERCLA, for example, defines "owner" as "any person owning" the facility. CERCLA § 101(20)(A)(ii), 42 U.S.C. § 9601(20)(A)(ii) (1994). This non-definition has caused courts to find that Congress intended the word to be given its ordinary meaning instead of a technical meaning. E.g., Edward Hines Lumber Co. v. Vulcan Materials Co., 861 F.2d 155, 156 (7th Cir. 1988). But cf. Long Beach Unified Sch. Dist. v. Dorothy B. Godwin Calif. Living Trust, 32 F.3d 1364, 1368 (9th Cir. 1994) (holding that its intent was to adopt "common law definitions" of the term, although purporting to adopt the "ordinary meaning" approach stated in *Edward Hines*).


15. Id. at 840.
"owner" of the property, was ordered by state environmental officials to remove the tanks and remediate the contaminated area. In evaluating the potential liability of the tenants as "owners," the court applied the same analysis it used to determine whether the tenants were "operators." The court articulated its "authority to control" test as follows:

The district court applied the correct standard in holding that the tenant defendants need not have exercised actual control in order to qualify as operators under § 9607(a)(2) [of CERCLA], so long as the authority to control the facility was present . . . [T]he district court's examination of the terms of the various leases in question indicated that it recognized that authority to control—not actual control—was the appropriate standard. This is the definition of the word "operator" that most courts have adopted, and it is one which properly declines to absolve from CERCLA liability a party who possessed the authority to abate the damage caused by the disposal of hazardous substances but who declined to actually exercise that authority by undertaking efforts at a cleanup.

The Nurad court's rationale for using an "authority to control" test was to place cleanup obligations on those who had the ability, because of their property interest, to address the problem either at the time it was created or when it was discovered. The court in Nurad held that the tenants were not liable as "owners" because under the terms of their leases they lacked any rights in the tanks or the area impacted by contamination from the tanks. Notably, the court carefully reviewed the underlying leases to ascertain the nature

16. Id. The tanks had been installed by William E. Hooper & Sons Co. prior to 1935 and used through 1962. Id. The property was sold in 1963 to Property Investors, Inc. which later leased several buildings on the property to various tenants. Id. Monumental Enterprises, Inc., as the successor to Property Investors, sold the property to Kenneth Mumaw in 1976. Id. Mumaw subdivided the property and sold a portion to Nurad, Inc. in 1976. Id. Nurad never used any of the underground storage tanks. Id. In 1987 Nurad was ordered to remove the tanks and cleanup the site, which it did at a cost of $226,000. Id. at 840-41.

17. Id. at 842. The court observed: "Nurad contends that as lessees the tenants had a property interest that necessarily included the implicit authority to control the portion of the site that contained the USTs." Id. at 843.

18. Id. at 842 (citations omitted).

19. Whether it be through contract, as in the case of an "operator," or through conveyance of an interest in the property, as in the case of an "owner."

20. See Nurad, 966 F.2d at 843 ("The statute [CERCLA] places accountability in the hands of those capable of abating further environmental harm, while Nurad's proposed definition . . . would rope in parties who were powerless to act.").

21. The court also held the tenants were not CERCLA "operators." Id. at 842.

22. Id. at 843.
and scope of the tenants’ rights. This indicates persons will be permitted to engage in the private ordering of their affairs in an effort to minimize environmental risk by minimizing their “authority to control.” It also means that loose language in documents may provide a basis for finding “authority to control” when it was not intended or desired.

Another approach to defining “owner” focuses on traditional property classifications rather than focusing on the “authority to control” created by the property interest. For example, in *Long Beach Unified School District v. Dorothy B. Godwin California Living Trust,* the court considered whether ownership of a pipeline easement in contaminated land would make the easement holder an “owner” or “operator” under CERCLA. The court followed a common law label approach noting: “The common law does not regard an easement holder as the owner of the property burdened by it. Rather, an easement is merely the right to use someone’s land for a specified purpose . . . .” It is hard to argue with the court’s statement of basic easement law, but it fails to provide a workable test for evaluating whether a property interest warrants CERCLA liability. Arguably, the *Long Beach* court’s real motivation for exempting easements from CERCLA “owner” status was its desire to mitigate the harsh and often unfair impact that could otherwise result. The court supported its holding stating:

23. *Id.* at 843-44.
24. *Structuring, supra* note 12, at 165-77 (discussing how Nurad principles can be used by lessors and lessees to manage their environmental risks).
25. Comparison of the non-participating royalty interest and the non-participating mineral interest demonstrates the importance of structuring to minimize environmental risk. From an environmental risk perspective, if the primary goal is to create a right to passively participate in mineral income, the royalty interest is superior to the mineral interest. It is much easier to argue that a royalty interest owner has no “authority to control” what goes on at the mineral development site. *Id.* at 164-65 (discussing benefits of nonparticipating interests).
26. 32 F.3d 1364 (9th Cir. 1994).
27. *Id.* at 1367-69.
28. *Id.* at 1368. The court sets up CERCLA for a mechanical property law classification analysis noting: “[W]e read the statute [CERCLA’s definition of "owner"] as incorporating the common law definitions of its terms.” *Id.*
29. The *Long Beach* case was followed by the court in *Grand Trunk W. R.R. v. Acme Belt Recoating, Inc.,* 859 F. Supp. 1125 (W.D. Mich. 1994), which concerned the CERCLA “owner” status of a person having an easement for ingress and egress across contaminated property. Like the court in *Long Beach,* the court in *Grand Trunk* failed to engage in a qualitative evaluation of the rights created in the easement holder to determine whether they rose to the level of CERCLA ownership. See *id.* at 1130-33. Accord *Acme Printing Ink Co. v. Menard, Inc.,* 870 F. Supp. 1465, 1484 (E.D. Wis. 1994) (applying similar principles to a limited license to enter land to dispose of solid waste).
Sound public policy supports this reading of the statute. Vast numbers of easements encumber land title records throughout the United States, establishing such diverse rights as the running of utility poles, cables and railroad track, irrigation, overflight, passage on foot, even use of a swimming pool—not to mention "scenic" easements.... Subjecting holders of these interests to CERCLA liability would not only disserve the statute's purposes—which is to make polluters pay for the damage they cause—but it would vastly and unjustifiably increase the potential number of CERCLA defendants.\(^{30}\)

The problem with the *Long Beach* court's reasoning is that it could be applied to the vast majority of persons otherwise encompassed by CERCLA's broad liability net. By exempting wholesale one group of not-so-culpable people, it will often cast the total financial burden of a cleanup on other people who are equally not-so-culpable, but not fortunate enough to have taken an easement in the property instead of some other property interest.

The court's analysis in *Nurad* would seem to more accurately allocate CERCLA liability than the approach in *Long Beach*. An "authority to control" analysis can be used to define the scope of "ownership" whether the interest is labeled an easement, lease, real covenant, equitable servitude, license, or any other interest that is less than a fee simple absolute. Although a court may arrive at the same conclusion of non-ownership applying the *Nurad* test, it provides a workable analytical construct for distinguishing between CERCLA owners and non-owners regardless of how a party's legal rights in the contaminated land are characterized.

For example, in the oil and gas context it would be unfair to classify all owners of a "mineral interest" as being either owners or non-owners for CERCLA purposes. Depending upon the nature of the rights granted or retained in the mineral interest, the "mineral interest" owner may have extensive rights to enter and use the property, very limited rights, or no rights whatsoever.\(^{31}\) The specific conveyance

\(^{30}\) *Long Beach*, 32 F.3d at 1369 (citations omitted).

\(^{31}\) The best example is the non-executive mineral interest where all development rights have been severed from the right to passively receive income from the interest. The grantee of the interest has no right to enter the property, conduct development operations, or authorize others to develop the property. These development, "authority to control," rights are all held by the grantor—who also owns a "mineral interest." *See generally* Altman v. Blake, 712 S.W.2d 117 (Tex. 1986) (discussing attributes of a mineral interest). Depending upon how the rights of each party are characterized, they could be readily distinguished applying a *Nurad* "authority to control" analysis to determine CERCLA "ownership." However, the analysis becomes more involved if the executive rights holder is found to have a fiduciary obligation to seek development of the interest on behalf of the non-executive rights holder. *See generally* Manges v. Guerra, 673
must be reviewed to ascertain the actual scope of the rights granted. Once these rights are identified, they can be evaluated to determine what sort of "authority to control" they confer on their owner. A similar analysis can be applied to any other interest created in property—including easements. In the typical oil and gas transaction, there will be a myriad of property interests—interests that have defied easy "common law" classification. 32

B. The Implied Easement of "Reasonable Use"

One of the most common mineral transactions resulting in multiple ownership of a property interest is the severance of a mineral estate from the surface estate. 33 Although each party will have a degree of exclusive ownership in their respective estates, they will also have certain non-exclusive rights in the other party's estate. Absent limiting language in the conveyance creating the property interests, the surface owner will have the right to continue using the surface that overlies the mineral estate. 34 The mineral owner will have the right to make "reasonable use" of the surface estate to the extent necessary to

S.W.2d 180, 183 (Tex. 1984) (executive rights holder has fiduciary obligation "to acquire for the non-executive every benefit that he exacts for himself"). Since the Manges case, courts have attempted to limit the scope of the fiduciary obligation created by the court in Manges. E.g., Mims v. Beall, 810 S.W.2d 876, 879 (Tex. Ct. App. 1991) ("In Manges, the court held that the fiduciary duty is owed only in the area of the executive interest owner's duty to obtain appropriate benefits for the non-participating royalty holders."); Pickens v. Hope, 764 S.W.2d 256 (Tex. Ct. App. 1988) (finding no fiduciary duty to holder of a specific fractional non-participating royalty). See David E. Pierce, Developments in Nonregulatory Oil and Gas Law: Relationships, Contracts, Torts, and the Basics, 41 INST. ON OIL & GAS L. & TAX'N 1-1, 1-6 to 1-19 (1990). However, to the extent the non-executive rights holder is held to have an enforceable right to force the holder of the executive rights to develop the property, the non-executive may have "authority to control." The executive could also be viewed as the "agent" of the non-executive for purposes of exercising the "authority to control." Most states have not addressed the nature of the executive/non-executive relationship; when they do it is unlikely they will apply the fiduciary approach used by the Texas courts. See generally Ernest E. Smith, Implications of a Fiduciary Standard of Conduct for the Holder of the Executive Right, 64 TEX. L. REV. 371 (1985).

32. JOHN S. LOWE, OIL AND GAS LAW IN A NUTSHELL 36-48 (3d ed. 1995) (discussing the various kinds of oil and gas interests and their unique characteristics); 1 DAVID E. PIERCE, KANSAS OIL AND GAS HANDBOOK § 4.10, at 4-10 to 4-13 (1986) ("In many instances the legal consequences of a transaction are determined according to how a particular oil and gas interest is classified.").

33. Although the oil and gas lease in jurisdictions like Texas would also be viewed as a conveyance of a fee simple determinable, Stephens County v. Mid-Kansas Oil & Gas Co., 254 S.W. 290 (Tex. 1923) (oil and gas lease creates a fee simple determinable in the oil and gas), the unique relationship created by the oil and gas lease will be discussed under the "contract" section of this article.

34. 1 EUGENE KUNTZ, A TREATISE ON THE LAW OF OIL AND GAS § 3.2(d), at 91-92 (1987).
efficiently develop the mineral estate. The fee owner's prior exclusive right to use the surface will be limited by the mineral owner's right to use it to access the severed mineral estate.

The end result is that two parties now have the right to use the surface of the land for different purposes. This is a classic formula for magnifying the environmental risk of both parties. As noted previously, when one party shares the right to use and occupy land with others, each party's environmental risks can be impacted by the actions of others on the land.

For example, in Quaker State Corp. v. U.S. Coast Guard, the surface owner was held to be an "owner" under the Clean Water Act (CWA) and, therefore, responsible for cleanup of an oil containment pit. The court had to determine who was the "owner or operator" of the pit area applying CWA Section 311. Use of the pit ceased in 1968; Quaker State's lease expired in 1975. In 1977, at the direction of the surface owner, Quaker State "covered the pit by bulldozing earth over it, compacting and seeding it." Quaker State subsequently abandoned its operations on the leased land in 1978. In 1985, representatives of the Coast Guard and the Environmental Protection Agency observed an oil sheen on the surface of a creek near the oil containment pit. The Coast Guard spent $430,000 to clean up the pit and abate the release. The court held the owner of the surface, at the time the discharge was discovered, was the "owner or operator" liable for cleanup costs under CWA Section 311(f).
Therefore, the surface owner of the land where the pit was located was the "owner" of the pit under CWA Section 311.48

The Quaker State case highlights the new context in which the concept of "reasonable use" must be viewed. If the mineral owner or lessee is given the right to make "reasonable use" of the surface, must the "reasonableness" be evaluated in light of new environmental liabilities, or liability risks, the surface owner might suffer? For example, it is permissible under the Resource Conservation and Recovery Act (RCRA)49 to dispose of certain exploration and production wastes at the lease site since, for purposes of RCRA, they are not classified as hazardous wastes.50 However, the presence of these "exempt" RCRA wastes could pose a risk under CERCLA51 because waste exempt

most likely to be in position to halt the discharge, to effect an immediate cleanup, or to prevent a discharge in the first place. If the onus of cleanup falls on the Government, he is the clearest and most expeditious source for reimbursement.

Id. See also White v. Regan, 575 N.Y.S.2d 375, 376-77 (N.Y. App. Div. 1991) (holding current owner of land liable for petroleum discharge under New York statute and government need not seek out other parties who caused or contributed to the discharge). Note that the court in Quaker State applied an "authority to control" type of analysis to define the current "owner" for purposes of the Clean Water Act. Quaker State, 681 F. Supp. at 285.


50. This is commonly known as the RCRA "associated waste exemption." Section 3001(b)(2)(A) of RCRA provides:

[D]rilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil or natural gas or geothermal energy shall be subject only to existing State or Federal regulatory programs in lieu of this subchapter [until the U.S. Environmental Protection Agency (EPA) completes a study on whether such wastes should be regulated as hazardous wastes].


The exemptions are found at 40 C.F.R. § 261.4(b) (1994) which provides, in part:

The following solid wastes are not hazardous wastes:

... (3) Mining overburden returned to the mine site.

... (5) Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas or geothermal energy.

... (7) Solid waste from the extraction, beneficiation, and processing of ores and minerals (including coal, phosphate rock and overburden from the mining of uranium ore)

51. See CERCLA §§ 101-405, 42 U.S.C. §§ 9601-9675 (1994). Also, even though the waste is exempt from "hazardous" waste management under RCRA, it can still be the subject of a
under RCRA can be considered hazardous substances under CERCLA.52

A “release” or “threat of a release” that warrants the expenditure of cleanup costs can give rise to liability for not only the party that disposed of the waste (the lessee and their drilling contractor), but also the party who owned the land at the time it was placed there (the surface owner).53 Since the deed or lease most likely fails to address these matters,54 the issue will be resolved through judicial interpretations of “reasonable use.” What was reasonable before CERCLA, and CERCLA-type statutes, may not be reasonable today. To the extent that the mineral interest owner’s or lessee’s conduct could appreciably increase the surface interest owner’s environmental risks, it may be outside the scope of “reasonable use” and thus not permissible under the deed or lease creating the right. Therefore, each development activity must be evaluated to identify the environmental risk and determine whether there are reasonable alternatives that pose less risk to the surface owner.

To date, one reported case highlights a landowner’s potential increased environmental risk as a basis for limiting oil and gas operator cleanup activities on leased land. In Gray v. Murphy Oil USA, Inc.,55 landowners sued various oil and gas companies asserting their land had been contaminated with naturally occurring radioactive material (NORM) generated by the companies.56 The landowners’ lawsuit included claims for negligence, nuisance, strict liability, trespass, assault and battery, and breach of contract, all arising out of the presence of NORM on their property.57 The oil companies attempted to enter the cleanup order under the “imminent hazard” provisions of RCRA. See RCRA § 7002(1)(B), 42 U.S.C. § 6972(a)(1)(B) (1994) (citizen suit “imminent hazard” authority); RCRA § 7003(a), 42 U.S.C. § 6973(a) (1994) (EPA “imminent hazard” authority). See supra note 8 (quoting relevant language from RCRA §§ 7002-7003).

52. To date, courts have been unwilling to try and harmonize exemptions under RCRA with CERCLA, or exclusions under CERCLA with RCRA. See, e.g., B.F. Goodrich Co. v. Murtha, 958 F.2d 1192, 1202 (2d Cir. 1992) (ruling RCRA’s “household waste” exemption does not exempt household waste from being classified as a hazardous substance under CERCLA).


54. Prospectively, mineral conveyances and oil and gas leases can and should address surface use from an environmental risk perspective. See Structuring, supra note 12, at 155-62, 165-77.

56. Id. at 749.
57. Id. at 751.
property to clean up the site.\textsuperscript{58} The landowners sought an injunction to prevent the oil companies from entering their property and conducting a cleanup "without first securing plaintiffs' approval of any proposed method of disposing of the contaminated soil."\textsuperscript{59}

Although not deciding the issue,\textsuperscript{60} the court's opinion sets out the plaintiffs' contention that as landowners their objections to the proposed cleanup were reasonable since under federal hazardous substance cleanup laws the landowners could be held liable for disposal of the NORM removed from their property.\textsuperscript{61} The plaintiffs asserted that NORM is a "hazardous substance" under CERCLA and that there was really no way the oil companies could effectively indemnify or hold the landowners harmless against subsequent CERCLA claims.\textsuperscript{62} The plaintiffs' pleadings stated:

American can provide no assurance that it will remain solvent during the entire period of potential liability under CERCLA or other law—which because of the long half-lives of NORM radio-nuclides is essentially infinite in duration. Clearly, Plaintiffs have an enormous interest in insuring that the remediation that American has offered to perform is done safely, properly and fully in accordance with not only present law, but the law of the foreseeable future.\textsuperscript{63}

The plaintiffs' assertions in the \textit{Gray} case illustrate that a landowner may have a quantifiable right to be free of unnecessary environmental risk created by others having a right to use the property. If risk-generating substances are deposited on the landowner's property, landowner liability can arise in two contexts: first, as an "owner" of the property where the waste is located;\textsuperscript{64} and second, as a "generator" of the waste if it has to be removed from the land at a later date

\textsuperscript{58} \textit{Id.} at 750. This is a valuable tactic that can be used to defend this type of case since it often eliminates the nebulous claims for "time bomb" damages. If the area has been cleaned up to levels accepted by the appropriate regulatory agencies, the plaintiff's damages will be substantially reduced, or perhaps eliminated. Also, cleaning up the site takes much of the economic incentive for the litigation away from the plaintiff, and their attorneys. For example, if the plaintiff recovered $500,000 in damages based on what it would take to clean up the site, in most cases there will be no requirement that the plaintiff spend any of the money they receive for any sort of cleanup. If the property is subsequently found to require a cleanup, the regulatory authorities will most likely order the oil company, which has already paid money to the plaintiff, to conduct the cleanup.

\textsuperscript{59} \textit{Id.}

\textsuperscript{60} The court was merely considering whether it should remand the case back to state court following removal to federal court. \textit{Id.}

\textsuperscript{61} \textit{Id.}

\textsuperscript{62} \textit{Id.}

\textsuperscript{63} \textit{Id.}

\textsuperscript{64} CERCLA § 107(a)(1)-(2), 42 U.S.C. § 9607(a)(1)-(2) (1994) ("current" owner and owner "at the time of disposal").
and taken to another location. These risks can be avoided if either non-risk-generating substances are used by the mineral developer or the risk-generating substances are properly managed at the time they are generated to ensure they do not become a waste liability for the surface owner.

As the potential for surface owner liability is realized, surface owners will demand that mineral developers employ the most effective development techniques available to minimize the surface owner's potential status liability. The minimum requirements will be defined in terms of "reasonable use." Developers that fail to employ the minimum requirements practiced by the industry will be subject to trespass claims by surface owners. However, even though the developer complies with the minimum requirements practiced by the industry, and, therefore, arguably within their "reasonable use" rights, the vigilant surface owner may be able to demand more on a case-by-case basis.


66. The mineral interest owner and lessee must also be concerned with what the surface owner does on the surface. Since the mineral owner/lessee possesses an implied easement to use the surface, Structuring, supra note 12, at 165, they will be concerned with surface owner actions that may impair the ability, or desirability, of using the surface to extract granted minerals. For example, if the surface owner brings drums of hazardous waste onto the surface, the mineral interest owner, or their lessee, may be very reluctant, due to the environmental risk, to exercise their surface use rights. The surface owner's actions would appear to be just as much an interference with the mineral interest owner's easement rights as if they constructed a building over the easement area. The mineral interest owner, or lessee, may now be able to limit the surface owner's use of the surface when it could impair the value of the mineral owner's easement rights. The mineral interest owner also has an argument that, as a concurrent "owner" of the property, the surface owner's actions are improperly increasing the mineral owner's environmental risk— even if the surface is never used to support mining activities. Id. at 154-55, 165.

67. The "minimum requirements" are a moving target. What is the acceptable "minimum" today may not be acceptable tomorrow. Also, it is likely that in the environmental liability arena courts may be more inclined to look at how the more innovative developers are addressing problems, instead of looking to the "average" or predominant practice. Cf. id. at 177.

68. E.g., Brown v. Lundell, 344 S.W.2d 863 (Tex. 1961) (holding improper disposal of produced water damaged the lessor's land and groundwater). In Brown the court held: The right of the lessee in exploring for and producing oil and gas embraces only the doing of those things expressly granted or necessarily implied in the lease as necessarily incidental thereto. All property rights not granted are reserved in the lessor. The rights of the lessor and lessee are reciprocal and distinct. If either party exceeds those rights he becomes a trespasser. Thus, if the lessee negligently and unnecessarily damages the lessor's land, either surface or subsurface, his liability to the lessor is no different from what it would be under the same circumstances to an adjoining landowner. Id. at 866 (citation omitted).
C. The Accommodation Doctrine

Conceptually, the accommodation doctrine comes into play when the mineral developer is engaging in "reasonable use" of the land, but the surface owner believes, under the circumstances, more is required of the developer to protect the surface owner's pre-existing land uses.\textsuperscript{69} The doctrine was first clearly articulated in \textit{Getty Oil Co. v. Jones}\textsuperscript{70} where the court held that an oil and gas lessee could be required to lower the profile of its pump jacks to accommodate the surface owner's pre-existing center pivot irrigation system.\textsuperscript{71} More recently, the Texas Supreme Court has characterized the doctrine as being based on the concept of "due regard" for the rights of the surface owner.\textsuperscript{72} This places the burden of proof on the surface owner to demonstrate that the "use of the surface is not reasonably necessary

\textsuperscript{69} In \textit{Hunt Oil Co. v. Kerbaugh}, 283 N.W.2d 131 (N.D. 1979), the court described the accommodation doctrine as follows:

In addition to, or underlying the question of what constitutes reasonable use of the surface in the development of oil and gas rights, is the concept that the owner of the mineral estate must have \textit{due regard} for the rights of the surface owner and is required to exercise that degree of care and use which is a just consideration for the rights of the surface owner. Therefore, the mineral estate owner has no right to use more of, or do more to, the surface estate than is reasonably necessary to explore, develop, and transport the minerals. Nor does the mineral estate owner have the right to negligently or wantonly use the surface owner's estate.

\textsuperscript{70} 470 S.W.2d 618 (Tex. 1971).

\textsuperscript{71} \textit{Id.} at 621-22 (emphasis added) (citations omitted).

\textsuperscript{72} \textit{Tarrant County Water Control and Improvement Dist. Number One v. Haupt, Inc.}, 854 S.W.2d 909, 911 (Tex. 1993) (citation omitted).
because of non-interfering and reasonable ways and means of produc-
ing the mineral that are available, the use of which will permit the
surface owner to continue the existing use of the surface."73

The accommodation doctrine could be applied in the environ-
mental context. Depending upon how the "existing use" requirement
is applied, surface owners should be able to establish that the on-site
disposal or escape of any hazardous substance, or other environmen-
tally questionable substance,74 will impair the existing use of the sur-
face estate. If the surface owner can demonstrate the availability of
reasonable alternatives to the activity creating the environmental risk,
an obligation to accommodate can arise.75

III. THE CONTRACT DIMENSION

Lessee rights and obligations will arise out of the express terms of
the oil and gas lease, implied "property" rights and limitations under
"reasonable use" principles, plus "contractual" rights and limitations
under implied lease covenants.

A. Express Oil and Gas Lease Terms

Where the mineral estate was severed from the surface estate
prior to being leased, the oil and gas lessee's surface use rights will be
limited by "reasonable use" property law principles.76 Although the
subsequent oil and gas lease may limit the lessee's rights with regard

73. Id. The court restated the Getty test as follows: Getty recognizes that if there is but one means of surface use by which to produce the minerals, then the mineral owner has the right to pursue that use, regardless of surface damage. On the other hand, if the mineral owner has reasonable alternative uses of the surface, one of which permits the surface owner to continue to use the surface in the manner intended (especially when there is only one reasonable manner in which the surface may be used) and one of which would preclude that use by the surface owner, the mineral owner must use the alternative that allows continued use of the surface by the surface owner.

74. This could include something that is not currently classified as a hazardous substance but which may present risks to the environment if not properly managed. If something is classified as a CERCLA hazardous substance tomorrow, it will be subject to retroactive cleanup, and cleanup liability. See United States v. R.W. Meyer, Inc., 889 F.2d 1497, 1506 (6th Cir. 1989), cert. denied, 494 U.S. 1057 (1990) (holding CERCLA, including pre-judgment interest provisions in 1986 amendments, is to be given retroactive effect); United States v. Northeastern Pharmaceutical & Chem. Co., 810 F.2d 726, 734 (8th Cir. 1986), cert. denied, 484 U.S. 848 (1987) (holding Congress intended CERCLA to apply retroactively).

75. Obviously it would be better for the surface owner to avoid having to engage in this analysis altogether by including express language in the mineral conveyance or oil and gas lease addressing such surface use issues. See Structuring, supra note 12, at 151-62, 173-77 (discussing and applying specific drafting suggestions).

76. See 4 KUNTZ, supra note 34, § 50.4(a), at 298.
to their mineral interest lessor, the lease cannot expand upon the prior surface use limitations created by the conveyance severing the minerals from the surface. However, in situations where the oil and gas lease is entered into prior to severance of the surface from the minerals, the terms of the oil and gas lease can define the respective rights of the parties. To the extent the lease document fails to address the issue, the void may be filled either by a "reasonable use" property analysis or an implied covenant contract analysis.

Most oil and gas lease forms used by lessees contain broad express grants of rights in the leased land without addressing specific surface use issues. For example, one form commonly encountered provides:

1. Lessor . . . hereby grants, leases and lets exclusively unto lessee for the purpose of investigating, exploring, prospecting, drilling, mining and operating for and producing oil, liquid hydrocarbons, all gases, and their respective constituent products, injecting gas, water, other fluids, and air into subsurface strata, laying pipe lines, storing oil, building tanks, power stations, telephone lines, and other structures and things thereon to produce, save, take care of, treat, manufacture, process, store and transport said oil, liquid hydrocarbons, gases and their respective constituent products and other products manufactured therefrom, and housing and otherwise caring for its employees, the following described land . . . .

7. Lessee shall have free use of oil, gas, and water from said land, except water from lessor's wells and tanks, for all operations hereunder, including repressuring, pressure maintenance, cycling, and secondary recovery operations . . . . Lessee shall have the right at any time during or after the expiration of this lease to remove all property and fixtures placed by lessee on said land, including the right to draw and remove all casing. When required by lessor, lessee will bury all pipe lines below ordinary plow depth. Lessee shall pay for damages caused by its operations to growing crops on said land. No well shall be drilled within two hundred feet (200 ft.) of any residence or barn now on said land without lessor's consent

Paragraph one of the lease form identifies the activities that can be pursued on the land but does not address "how" the authorized activities will be pursued. Paragraph seven gives the lessee broad rights to

77. See id.
78. See id. § 55.1, at 17.
79. See id. § 55.2, at 19.
80. Oil and Gas Lease Form 88—(Producers), Kan., Okla. & Colo. 1962 Rev. Bw, Kansas Blue Print Co. Inc. [hereinafter Form 88].
use water from the leased land, imposes limits on burying pipelines and placing wells near existing buildings, and requires payment for damages caused to growing crops. However, the details of development technique and surface use are not addressed.

Since the oil and gas lease is usually silent regarding development technique and surface use, a “reasonable use” analysis will be employed by courts to define the scope of the lessee’s surface use rights.81 The analysis will be the same as used to define surface rights and obligations following the severance of a mineral estate from the surface estate. However, there will typically be more express language to consider in the lease context than when dealing with a mineral deed. For example, an express right to build “structures . . . to . . . treat, manufacture, [and] process”82 oil and gas makes it clear the lessee can use the surface for such purposes. The unanswered question is whether the way the lessee proposes to exercise its right will be acceptable under the circumstances. “Reasonable use” and accommodation concepts will be used to address these issues.83 However, even if the lessee’s proposed course of conduct passes the “reasonable use”/accommodation property tests, in the oil and gas lease context it must also pass contractual implied covenant tests.

B. *Implied Covenants*

Since 1905, the industry has been told that the lessee, absent express provisions otherwise in the oil and gas lease, must do “[w]hatever, in the circumstances, would be reasonably expected of operators of ordinary prudence, having regard to the interests of both lessor and lessee.”84 This passage created the “prudent operator” standard to govern lessee activity when guidance is not found in the express terms of the oil and gas lease.85 If the lease doesn’t specify what the lessee must do in a particular situation, the lessee must act as a “prudent operator,” which includes not only technical competence, but also an awareness of the dual lessor/lessee interests it must promote.86 As Professor Lowe has noted: “Implied covenants in oil and

81. E.g., Mai v. Youtsey, 646 P.2d 475, 479 (Kan. 1982) (finding lessee surface use rights implied to “effectuate the grant” by providing lessee with the rights necessary to enjoy the property interest it has been granted).
82. Form 88, supra note 80, ¶ 1.
83. See discussion infra Parts II.B.-C.
84. Brewster v. Lanyon Zinc Co., 140 F. 801, 814 (8th Cir. 1905).
86. See Lowe, supra note 32, at 300-02.
gas leases are unwritten promises that generally impose burdens on lessees and protect lessors."87

The "prudent operator" standard has been used to ensure that the lessee's operations keep pace with technological development88 as well as changes in the law.89 The "prudent operator" concept, in the environmental context, implicates both the technical and legal realms.90 For example, if the lessee can conduct its drilling and reworking operations without the use of earthen pits, does it have a "contractual" obligation to do so, even though it will increase the lessee's costs? What about the use of non-toxic drilling mud and other drilling and production chemical products? What about recycling drilling mud from site to site to reduce the waste ultimately generated?

To the extent that the lessor can demonstrate a cognizable increase in environmental risk associated with the activity, and reasonable alternatives,91 the "prudent operator" may be required to change its operating practices to accommodate the lessor's environmental concerns—as a matter of contract law as opposed to property law.92

87. Id. at 296.
88. See Hemingway, supra note 85, at 479-81.
89. Cf. Jacqueline L. Weaver, Implied Covenants in Oil and Gas Law Under Federal Energy Price Regulation, 34 Vand. L. Rev. 1473, 1559 (1981). The previous sections demonstrate how federal environmental law has potentially expanded the prudent operator's obligations to their lessor. However, note that the source of these expanded obligations is new lessor "liability"—not specific statutory commands to the lessee. If a statute requires lessees to reclaim a production site, the statutory obligation typically becomes a measure of "prudent operation." However, when the statute does not command the lessee to do anything, it is much more difficult to use the statutory obligation to define prudent operation. This is particularly the case when the lessee is permitted by statutory law to engage in the activity in question—such as disposing of "exempt" RCRA oil and gas production wastes at the lease site. See supra text accompanying notes 49-52. The new breed of "liability-forcing" environmental statutes do not rely upon express command-and-control techniques to achieve environmental goals. Instead, they impose cleanup liability on a broad range of statutorily defined parties; such as present and former property owners and operators. Liability-Forcing, supra note 1, at 382-84. Therefore, "prudent operation" in this new statutory context will arguably include an evaluation of lessee activities that may unnecessarily increase the lessor's environmental liabilities. See id. at 422.
90. See, e.g., Gillette v. Pepper Tank Co., 694 P.2d 369, 373 (Colo. Ct. App. 1984) (holding the lessee had breached the "implied covenant to operate prudently" arising out of "improper maintenance and discharge of water, damage to the surface, and a poorly conducted water-flood operation"); Shaw v. Henry, 531 P.2d 128, 132 (Kan. 1975) (finding the lessee breached the implied covenant of "efficient management and operation" when it improperly disposed of produced water into storage ponds).
91. Even though the alternatives may be more expensive.
92. This would distinguish the relationship between the oil and gas lessee and its lessor/surface owner from the surface owner and mineral owner relationship. The latter relationship is based solely upon property law concepts while the former is based upon property law and contract law. The lessor/lessee relationship gives rise to another layer of analysis that may further limit the lessee's conceded property law rights.
Building on a prior example, recall that although the lessee may be permitted under state and federal law to dispose of certain drilling fluids by burying them at the lease drill site,93 such a practice may not be "prudent operation" since it can expose the lessor to potential environmental liabilities in the future.94 Although the public's interests, in the short run, are served by complying with the law, and the lessee's interests are served by an economical disposal option, the decision negatively impacts the lessor's interest. This implicates the "prudent operator" balancing act dictated by the Brewster case: "having regard to the interests of both lessor and lessee."95 What was previously acceptable may no longer be permissible because of the negative impact it can have on the lessor.96

Therefore, when the landowner enters into an oil and gas lease, they have three levels of analysis to explore in evaluating the propriety of the lessee's specific surface use decisions. First, does the activity fall within the scope of "reasonable use?"97 Second, even if the activity constitutes "reasonable use," does the lessee have an obligation to accommodate the lessor's pre-existing uses of the property? Third, if the activity passes the "reasonable use" and accommodation analyses, is it the sort of activity a "prudent operator" would undertake while promoting the mutual interests of the lessee and the lessor? A possible fourth level of analysis concerns rights the parties may have as a matter of statutory law.

IV. THE STATUTORY DIMENSION

In Oklahoma, pooling laws have authorized development operations on lands that are not under lease.98 For example, in Texas Oil and Gas Corp. v. Rein,99 the Oklahoma Corporation Commission, in order to create a 640-acre pooled unit, force pooled a 160-acre tract

93. See supra text accompanying notes 49-50.
94. See supra text accompanying notes 51-52.
95. Brewster v. Lanyon Zinc Co., 140 F. 801, 814 (8th Cir. 1905).
96. See James M. Colosky, The Implied Covenant for Diligent and Prudent Operations in an Environmental Era, 39 ROCKY MTN. MIN. L. INST. 15-1, 15-4, 15-25 to 15-28 (1993). Colosky has identified the implied covenant for diligent and prudent operations as the source of lessee implied contractual obligations in the environmental context. Id.
97. This presumes the express terms of the oil and gas lease do not clarify the issue.
98. A similar situation could occur under Louisiana's forced pooling law. Nunez v. Wainoco Oil & Gas Co., 606 So. 2d 1320, 1326 (La. Ct. App. 1992), cert. denied, 608 So. 2d 1010 (La. 1992) "The Commissioner of Conservation is authorized to designate a drilling site 'at the optimum position in the drilling unit for the most efficient and economic drainage of such unit.'" Id. at 1326 (quoting LA. REV. STAT. ANN. § 30:9(c) (West 1989)).
owned by Rein with 480 acres under lease to Texas Oil and Gas Corp. Rein owned the surface and minerals in the 160-acre tract and refused to lease it for development. The court held that the Oklahoma pooling statute "authorizes the Commission to establish the well location at any location upon the spacing unit"—even though the unleased mineral and surface owner objects to having a well on their property. In a subsequent case, the Oklahoma Supreme Court observed: "Appellant, the owner of an unsevered mineral interest, was forced by the Corporation Commission to participate in the unit operation. He was forced to accept the intrusion on his land occasioned by the order directing the well to be drilled there." Although the court held the unsevered mineral interest owner should be compensated for locating the well on its property, the court reaffirmed that "a forced-pooled surface and mineral owner is required by the State to accept surface damage to his property."

The force-pooled landowner can suffer increased environmental risk as a result of unit development that takes place on their land; the status-based environmental statutes do not exempt forced pooling. The targeted surface and mineral owner apparently has two options it might pursue. First, the landowner could, in effect, seek to sell its surface interest to the developer. Second, if the landowner wished to retain ownership of the surface, they could seek provisions in the pooling order to limit or leverage some of the environmental risks. Oklahoma Statute Title 52, Section 87.1(e) provides, in part:

Where . . . such owners have not agreed to pool their interests and where one such separate owner has drilled or proposes to drill a

100. Id. at 1278.
101. Id.
102. Id. at 1279. In a companion case the Oklahoma Supreme Court summarized its holding in Rein as follows:

The essence [of Rein's] contentions is that the effect of the order in this case, and the order in the companion case concerning the well location, is to grant applicant the right to drill upon Rein's property even though he has never contracted or consented to allow anyone to drill thereon.

We have considered this argument in the companion case . . . and need not discuss it further herein.

Id. at 1281.
104. Id.
105. Id.
106. Although the surface owner may ultimately be able to successfully assert a third-party defense under CERCLA § 107(b)(1), 42 U.S.C. § 9607(b)(3) (1994), they would initially be brought into the CERCLA liability net and have to expend considerable time, effort, and money (attorney fees), in an effort to establish their defense.
well on said unit ... the Commission ... shall, upon a proper applica-
tion therefor and a hearing thereon, require such owners to pool
and develop their lands in the spacing unit as a unit. ... All orders
requiring such pooling shall be made after notice and hearing, and
shall be upon such terms and conditions as are just and reasonable
and will afford to the owner of such tract in the unit the opportunity
to recover or receive without unnecessary expense his just and fair
share of the oil and gas.107

Owners of the tract where the well is to be located could argue that
the Commission’s order should require the drilling parties, at a mini-
umum, to indemnify them against environmental liabilities associated
with development. The pooling order could also limit development
practices, such as the use of pits, which increase the property owner’s
environmental liability. Potential CERCLA liability alone would
seem to make such “terms and conditions” in a pooling order “just
and reasonable.‖108

V. CONCLUSION

The very foundation of oil and gas development is built upon the
ownership and control of oil and gas properties by more than one
party. Mineral interests are severed from surface interests, minerals
are leased, developers enter into assignments, farmouts, joint operat-
ing agreements, pooling orders are issued, and interests are placed
into fieldwide units for enhanced recovery operations.109 It seems as
though at every turn a new property interest is being created in the
minerals and the surface estate that will be used to access the miner-
als. American property law has been an accommodating ally in the


108. In McDaniel v. Moyer, 662 P.2d 309 (Okla. 1983), the district court ordered the opera-
tor of a pooled unit to post a $50,000 bond to secure payment of compensation for surface
damages and use of an abandoned and plugged well bore on the nonconsenting party’s land. Id.
at 311. The Oklahoma Supreme Court held that the unit operator had the authority to locate the
unit well anywhere within the area designated by the Commission in its pooling order, including
the disputed surface area. Id. at 312-13. Although the court held it was improper to impose the
bond requirement, the court’s holding does not rule out the use of a bond under appropriate
circumstances. Id. at 314 n.15. The court noted: “There had been as yet no invasion of the
landowners’ asserted rights and no occasion shown for equitable intervention or relief.” Id. at
314. The unit operator’s right to use the existing well bore had not been determined so a bond-
ning requirement was premature. Id. at 313 n.13.

109. For a discussion of the potential environmental ramifications created by these transac-
tions, see Structuring, supra note 12, at 149-85.
process. Even the rule against perpetuities is becoming a less significant limitation on the attorney’s imagination in creating new property interests to achieve a client’s goals.

In the past, multiple ownership issues have focused upon uniting the varied interests to facilitate development of the minerals. Today, a major multiple ownership issue is evaluating how development of the minerals can magnify the environmental risk of other interest “owners.” As courts acknowledge the environmental risk imposed upon surface owners arising out of routine mineral development, the mineral developers’ rights will be limited, and obligations expanded, to protect the surface owner’s rights. The flexible principles of “reasonable use,” accommodation, and “prudent operation” can each be employed by courts to adjust the rights and obligations of the mineral developer to eliminate the avoidable and unnecessary environmental risks associated with mineral development.

110. E.g., Day & Co. v. Texland Petroleum, Inc., 786 S.W.2d 667 (Tex. 1990) (holding a severed executive right is a property interest instead of a right based in contract). In reversing the limiting approach taken in Pan American Petroleum Corp. v. Cain, 355 S.W.2d 506 (Tex. 1962), overruled by Day, 786 S.W.2d 667, the court in Day held:

We erred in Cain when we compared the executive right to a power of appointment. Although the executive right is similar to a power, it is not a product of contract, but rather a creature of property rights. Even when it is severed from the other rights or attributes incident to the mineral estate, it remains an interest in property.

111. E.g., KAN. STAT. ANN. §§ 59-3401 to 59-3408 (1994) (adopting the Uniform Statutory Rule Against Perpetuities). KAN. STAT. ANN. § 59-3404 (1994) excludes from the rule “[a] nonvested property interest . . . arising out of a nondonative transfer, except a nonvested property interest . . . arising out of [listed marital, family, or estate transactions].”

112. The risk for the lessee is not that the lessor will be standing over its operations demanding a particular course of action. The real risk is that lessors will raise the issue after-the-fact, once they discover how wastes and other operations at the site—associated with past activities—can impact them today. This puts the lessor in a position to demand that the materials be dug up and taken off site, and the lessor’s land “remediated.” Typically, however, they will seek a lump sum payment to compensate for the additional risks they are being forced to endure. The claim will sound in contract and tort. Under a contract theory the lessor will assert their lessee failed to live up to its implied contractual obligations under the oil and gas lease. Since this sort of liability has existed since at least 1980, a large number of sites may be candidates for lessor action. Under a tort theory the lessor will assert the lessee exceeded the scope of reasonable use and has committed a trespass. The lessor will also have available the usual grab-bag of environmental tort claims such as nuisance, negligence, and strict liability. See generally Marshall v. El Paso Natural Gas Co., 874 F.2d 1373 (10th Cir. 1989) (awarding landowner $400,050 actual and $5,000,000 punitive damages arising out of environmental risk associated with well that had been plugged and abandoned).